# Abstract

A pressure-difference sensor, which is asymmetrical by design, includes a measuring apparatus having a first half-chamber with a first volume $V_1$, which is sealed by a first separating membrane having a first membrane stiffness $E_1$, and a second half-chamber with a second volume $V_2$, which is sealed by a second separating membrane having a second membrane stiffness $E_2$, wherein the first half-chamber is separated from the second half-chamber by a pressure sensitive element, especially a measuring membrane, and the first half-chamber is filled with a first transfer liquid having a first coefficient of thermal expansion $\alpha_1$ and the second half-chamber is filled with a transfer liquid having a second coefficient of thermal expansion $\alpha_2$. For making the temperature-dependent, separating-membrane pressure-error dP symmetrical, the design is so embodied that a first product of the first membrane stiffness, the first volume and the first coefficient of thermal expansion is essentially equal to a second product of the second membrane stiffness, the second volume and the second coefficient of thermal expansion ($E_1 * V_1 * \alpha_1 = E_2 * V_2 * \alpha_2$), wherein, additionally, at least one factor of the first product deviates, by design, from the corresponding factor of the second product.